

THE INSTITUTE OF PAPER CHEMISTRY

Appleton, Wisconsin

SUMMARY OF DATA OBTAINED IN BASE-LINE STUDY ON
LINERBOARD DURING APRIL AND MAY, 1965

Project 1108-13

Report

to

TECHNICAL DIVISION
FOURDRINIER KRAFT BOARD INSTITUTE, INC.

July 20, 1965

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Appleton, Wisconsin

SUMMARY OF DATA OBTAINED IN BASE-LINE STUDY ON
LINERBOARD DURING APRIL AND MAY, 1965

PART I. GENERAL

	Current Report	Previous Report
Period	April-May, 1965	Feb.-March, 1965
No. of mills	19	20
No. of samples	124	126
Nonparticipants:	1. International (Panama City) 2. Olin Mathieson 3. St. Regis (Pensacola) 4. Western Kraft	1. Olin Mathieson 2. St. Regis (Pensacola) 3. Western Kraft

PART II. QUALITY DATA

A. Summary of Data	Report	Current Mill Data			12-Month
		Max.	Min.	Av.	Cum. F.K.I. Av.
Basis weight, lb./1000 sq. ft.	Cur.	43.0	41.9	42.4	42.6
	Prev.	43.5	41.7	42.5	42.7
Caliper, pt.	Cur.	13.5	11.2	12.7	12.6
	Prev.	14.1	11.5	12.6	12.6
Bursting strength, p.s.i.g.	Cur.	123	106	110	111
	Prev.	119	106	111	111
M.D. Elmendorf tear, g./sheet	Cur.	379	262	330	335
	Prev.	365	270	328	335
C.D. Elmendorf tear, g./sheet	Cur.	420	327	377	381
	Prev.	409	319	377	382

B. Trends in Quality Data in Current Report
(Reference being data from previous report)

Basis weight:	Decreased from 42.5 to 42.4
Caliper:	Increased from 12.6 to 12.7
Bursting strength:	Decreased from 111 to 110
M.D. Elmendorf tear:	Increased from 328 to 330
C.D. Elmendorf tear:	No change

All tests
essentially
unchanged.

PART III. CALIBRATION DATA

A. Summary of Data

Range, %	Current Report		Previous Report		6-Month Average, %
	No. of Mills	%	No. of Mills	%	

Basis Weight

+ 0.5	10	52.6	16	80.0	76.7
+ 1	18	94.7	19	95.0	98.3
+ 2	19	100.0	20	100.0	100.0

Caliper

+ 0.5	1	5.3	2	10.0	6.7
+ 1	6	31.6	11	55.0	38.3
+ 2	16	84.2	15	75.0	76.7
+ 3	16	84.2	17	85.0	88.3
+ 4	18	94.7	20	100.0	100.0
+ 5	19	100.0			

Bursting Strength

+ 0.5	7	36.8	3	15.0	20.0
+ 1	10	52.6	8	40.0	38.3
+ 2	14	73.7	13	65.0	63.3
+ 3	19	100.0	16	80.0	76.7
+ 4	--	--	18	90.0	88.3
+ 5	--	--	18	90.0	93.3
+ 7.5	--	--	20	100.0	100.0

M.D. Elmendorf Tear

+ 0.5	0	0.0	0	0.0	1.9
+ 1	0	0.0	2	11.1	11.1
+ 2	3	17.6	4	22.2	24.1
+ 3	4	23.5	7	38.9	33.3
+ 4	6	35.3	9	50.0	40.7
+ 5	6	35.3	10	55.6	50.0
+ 7.5	11	64.7	11	61.1	63.0
+10	14	82.4	15	83.3	85.2
+12.5	14	82.4	17	94.4	92.6
+15	16	94.1	18	100.0	100.0
+16	17	100.0			

C.D. Elmendorf Tear

+ 0.5	1	5.9	1	5.6	7.4
+ 1	2	11.8	3	16.7	22.2
+ 2	4	23.5	6	33.3	38.9
+ 3	8	47.1	8	44.4	50.0
+ 4	11	64.7	11	61.1	64.8
+ 5	11	64.7	12	66.7	75.9
+ 7.5	14	82.4	14	77.8	85.2
+10	17	100.0	16	88.9	94.4
+12.5	--	--	17	94.4	96.3
+15	--	--	18	100.0	100.0

B. Trends in Calibration
 Data

Good agreement with
 previous data at all
 levels except the 0.5%
 level.

Good agreement with
 previous data at all
 levels except the 1%
 level.

Agreement is very good
 and compares favorably
 with previous data.

Agreement with previous
 data is slightly poorer
 at the 5% level and below
 but approximately the same
 at levels above 5%.

Agreement for the current
 period at almost all levels
 compares favorably with that
 for the previous period and
 the previous six-month aver-
 age.